



N THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT APPLICATION EXAMINING OPERATIONS

Applicant:

Baoxin Li

Group Art Unit: 3711

Serial No.:

10/058,684

Examiner:

Filed:

Jan. 28, 2002

Title:

SUMMARIZATION OF SUMO VIDEO CONTENT

PECEIVED

TECHNOLOGY CENTER R3700

RECEIVED

SEP 1 7 2002

Technology Center 2100

INFORMATION DISCLOSURE STATEMENT IN ACCORDANCE WITH 37 CFR §1.98

Chernoff, Vilhauer, McClung & Stenzel, LLP 1600 ODS Tower 601 S W Second Avenue Portland, Oregon 97204-3157

July 22, 2002

Box Patent Application Commissioner for Patents Washington, D.C. 20231

Dear Sir:

Applicants submit herewith copies of publications which they are aware of and which they desire to have considered by the Patent Office in accordance with 37 CFR §1.97. In accordance with 37 CFR §1.97(b)(3), this Information Disclosure Statement is being submitted before the mailing date of a first Office Action on the merits of the above-identified application.

In accordance with 37 CFR §1.97(h), the filing of this Information Disclosure Statement will not be regarded as an admission that any patent or publication or combination of patents referred to herein is, or is considered to be, material to patentability under 37 CFR §1.56(b) unless specifically designated as such.

A list of the publications are enclosed herewith set forth on the attached page of Form PTO-1449 (Modified).

The person making this statement is the attorney who signs below on the basis of the information supplied by the inventor and the information in his file.

Respectfully submitted,

Kevin L. Russell

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CERTIFICATE OF MAILING

I hereby certify that these documents are being deposited with the United States Postal Service as first class mail in an envelope addressed to: Box Patent Application, Commissioner for Patents, Washington, D.C. 20231.

Dated: July 22, 2002

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FORM PTO-1449 (Modified)			FRAT & TRADENMEN		ATTY. DOCKET NO. KLR 7146.125		SERIAL NO. 10/058,684			
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT					APPLICANT: Baoxin Li		SERIAL NO. 10/058,684 PECFILED TECHNOLOG: CENTER R3700			
	(U	se several sheets if nece	essary)		FILING DATE Jan. 28, 2002		GROUP 3711	" CENTER R3700		
			REFEREN	CE D	DESIGNATION					
U.S. PATENT DOCUMENTS										
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	_	NAME	CLASS	SUBCLASS	FILING I APPROP	RIATE	
	AA	4,183,056	Jan. 8, 1980	Ev	ans, et al.			REC	EIVED	
_	AB	5,805,733	Sep. 8, 1998	Wa	ang, et al.			SED 1	~	
	AC	5,956,026	Sep. 21, 1999	Ra	takonda		Tool	OLF I	1 2002	
	AD	5,995,095	Nov. 30, 1999	Ra	takonda		1001	nology C	enter 210	
			FOREIGN PA	TENT	C DOCUMENTS					
		DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS	TRAN YES	SLATION NO	
	ВА									
	ВВ								T T	
OTHER ART										
	CA	Michael A. Smith, et al., Video Skimming for Quick Browsing Based on Audio and Image Characterization; Carnegie Mellon, School of Computer Science, Pittsburgh, PA; July 30, 1995; pp. 0-21.								
c	СВ	Frank R. Kschischang, et al February 2001; pp. 498-519	ng, et al., Factor Graphs and the Sum-Product Algorithm; IEEE Transactions of Information Theory, Vol. 47, No. 2,							
•	СС	Stefan Eickeler, et al.; Content-Based Video Indexing of TV Broadcast News Using Hidden Markov Models; IEEE International Conference of Acoustics, Speech and Signal Processing, Phoenix, AZ, 1999.								
	CD	Padhraic Smyth, Belief Networks, Hidden Markov Models, and Markov Random Fields: a Unifying View; Information and Computer Science Department of University of California, Irvine, CA; March 20, 1998, pp. 1-11.								
	CE	Wayne Wolf, Hidden Markov Model Parsing of Video Programs; Department of Electrical Engineering, Princeton University, 1997, pp. 2609-2611.								
	CF	H. Pam, et al., Detection of Slow-Motion Replay Segments in Sports Video for Highlights Generation, IEEE International Conference of Acoustics, Speech, and Signal Processing, Salt Lake City, UT, 2001.								
	CG	Youn Rui, et al.; Automatically Extracting Highlights for TV Baseball Programs, Microsoft Research, Redmond, WA, 2000; pp. 105-115.								
	СН	Lawrence R. Rabiner, A Tutorial on Hidden Markov Models and Selected Applications in Speech Recognition, Proceedings of the IEEE, Vol., 77, No. 2, February 1998; pp. 257-286.								
	CI	Boreczky, it al., A Hidden Markov Model Framework for Video Segmentation Using Audio and Image Features, FX Palo Alto Laboratory, Palo Alto, CA.								
	C1	Zhu Liu, et al., Detecting News Reporting Audio/Visual Information, AT&T Labs - Research, Red Bank, NJ; IEEE International Conference on Image Processing, Kobe, Japan, 1999.								

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711 5 8 5000		Ullas Gargi, et al., Performance Characterization of Video-Shot-Change Detection Methods. IEEE Transactions of Circuits and Systems for
FRATE TRADEMA	CL	Ccideo Technology, Vol 10, No. 1, February 2000; pp. TECHNOLOGI. CENTER RAZION Rainer Lienhart, Comparison of Automatic Shot Boundary Detection Algorithms, Microcomputer Research Labs, Intel Corporation, Santa Clara, CA.; IS&SPIE Conference on Storage and Retrieval for Image and Video Databases VII, San Jose, CA, Jan. 1999; pp. 290-301.
	СМ	M. R. Naphade, et al., A High-Performance Shot Boundary Detection Algorithm Using Multiple Cues, IEEE International Conference on Image Processing, Chicago, IL 1998; pp. 884-887.
	CN	Stuart J. Golin, New Metric to Detect Wipes and Other Gradual Transitions in Video, Sarnoff Corporation, Princeton, NJ;IEEEConference on Visual Communications and Image Processing, San Jose, CA, Jan. 19999; pp. 1464-1474.
	со	H. B. LU, et al. Robust Gradual Scene Change Detection, IEEE International Conference on Image Processing, Kobe, Japan, 1999.
	СР	Toshio Kawashima, Indexing of Baseball Telecast Content -Based Video Retrieval, Dept. of Information Engineering, Hokkaido University, Sapporo, Japan; IEEE 1998, pp. 871-874.
	CQ	Dennis Yow, et al. Analysis and Presentation of Soccer Highlights from Digital Video, Department of Electrical Engineering of Princeton University, Princeton, NJ, 1995.
	CR	Drew D. SAR, et al. Automated Analysis and Annotation of Basketball Video, SPIE Vol.3022, 1997, pp. 176-187.
	cs	Yak Wang, et al., MULTIMEDIA CONTENT ANALYSIS: Using Both Audio and Visual Clues, IEEE Signal Processing Magazine IVED November 200, pp. 12-35.
	СТ	SEP 1 7 2002

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Examiner Signature	Date Considered	

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language translation is attached.

Information Disclosure Statement -- PTO-1449 (Modified)